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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,674	04/27/2001	Chiho Kawakami	018775-825	9034
7590	07/15/2004		EXAMINER	
Platon N. Mandros BURNS, DOANE, SWECKER & MATHIS, L.L.P. P.O. Box 1404 Alexandria, VA 22313-1404			AZARIAN, SEYED H	
			ART UNIT	PAPER NUMBER
			2625	6
DATE MAILED: 07/15/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/842,674	KAWAKAMI ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Seyed Azarian	2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 21 April 2001.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 12-22 is/are allowed.
- 6) Claim(s) 1-11 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 27 April 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

**Claim Rejections - 35 USC § 103**

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-11, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuji et al (U.S. patent 5,796,869) in view of Sakai et al (U.S. patent 5,784,180).

Regarding claim 1, Tsuji discloses an image processor for detecting a circular pattern in an image comprising (column 5, lines 8-21, detecting circular image);  
a binarization unit, which binarizes input image data to provide bi-level image data (column 6, lines 42-58 binarizing color signal to the image output);

a counter, which counts pixels having a predetermined value in a block of a polygon having n vertices in the bi-level image data (column 13, lines 19-40 counting number of pixels within the circle);

a controller which decides, based on a number of the pixels having the predetermined value counted by said counter, whether the circular pattern is detected in the image or not (column 10, lines 3-29, determining, if the condition is satisfied, also column 2, lines 38-57, detecting specific color on an image, where the number of pixels a given area defined by a set of lines detection).

However Tsuji fails to disclose, "wherein n denotes a natural number equal to or larger than eight". On the other hand Sakai in the same field of scanning teaches a scanner which serves as a laser output unit for converting an image signal from color reader into an optical signal having a polygonal shape or octagon column 19, lines 40-49).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made, to modify Tsuji invention according to the teaching of Sakai because it provides an image memory capable of storing plurality of pieces of image information that are different from each other or may have different shape, which can easily be implemented in an image processor such as scanning device.

Regarding claims 4 and 5, Tsuji discloses the image processor according to claim 1, wherein the predetermined value in the bi-level image data is one and zero (column 6, lines 42-58, refer to binarization or bi-level).

Regarding claims 2, 3 and 6-11, it recites similar limitation as claims 1, 4 and 5, are similarly analyzed.

### Allowable claims

3. Claims 12-22 are allowable.

The following is an examiner's statement of reasons for allowance.

The claim 12, is allowable due to controller decides a width of scan until which said detector detects a rim of the specified pattern, in a direction in correspondence to the moving direction of the detection window, and changes a moving distance of the detection window based on the decided width of scan.

The closest prior art of record (Tsuji) teaches an image processing system, which reads, in pixel units, an image on an original document using a scanner. But does not teach or suggest moving direction of the detection window, and changes a moving distance of the detection window based on the decided width of scan.

These key features in combination with other features of the claimed invention are neither taught nor suggested by the art of record.

Claims 15 and 19-22, recites substantial very similar limitations as claim 12 above and is allowed for the same reason.

### Other prior art cited

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. patent (5,515,451) to Tsuji et al is cited for image processing system for selectively reproducing documents.

U.S. patent (4,855,772) to Hashimoto et al is cited for electronically controlled camera.

U.S. patent (4,198,656) to Mathisen is cited for video sequencer-processor.

U.S. patent (6,695,209) to L is cited for triggerless optical reader with signal enhancement features.

U.S. patent (6,643,400) to Murakawa et al is cited for image processing apparatus and method for recognizing specific pattern and recording medium having image-processing program recorded thereon.

**Contact Information**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Azarian whose telephone number is (703) 306-5907. The examiner can normally be reached on Monday through Thursday from 6:00 a.m. to 7:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached at (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR.

Status information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Art Unit: 2625

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July 1, 2004